

CLAIMS

What is claimed is:

1 1. A method of facilitating user entry of a manually-adjustable data
2 setting normally imaged in a predetermined size on an imaging display in an aircraft
3 cockpit, comprising the steps of:

4 manually manipulating, by the user, a control for one of adjusting the data
5 setting and selecting the data setting to be adjusted;

6 sensing said manipulating of the control by the user;

7 enlarging, in response to said sensed manipulating of the control by the
8 user, the image of the data setting on the display from the predetermined size to a
9 predeterminately enlarged size to unambiguously direct the user's attention to the
10 predeterminately enlarged imaged data setting to be adjusted;

11 maintaining the enlarged image of the data setting on the display during
12 said sensed manipulating of the control by the user; and

13 reducing the enlarged image of the data setting on the display from the
14 predeterminately enlarged size to the predetermined size when said sensed manipulating
15 of the control is determined to have ceased.

1 2. The method of claim 1, wherein said predetermined enlargement
2 comprises an approximate doubling of the predetermined size of the image of the data
3 setting on the display.

1 3. The method of claim 1, further comprising the step of presenting on
2 the display an imaged frame encircling the enlarged data setting image to further
3 unambiguously direct the user's attention to the imaged data setting to be adjusted.

1 4. The method of claim 1, wherein the imaged data setting comprises a
2 graphical representation on the display of a parameter having a value to be adjusted, said
3 enlarging step further comprising enlarging at least a portion of the graphical
4 representation at which the adjusted value is graphically imaged.

1 5. The method of claim 4, further comprising the step of presenting on
2 the display an imaged frame encircling the enlarged portion of the graphical
3 representation to further unambiguously direct the user's attention to the imaged data
4 setting to be adjusted.

1 6. The method of claim 1, wherein the imaged data setting comprises
2 an alphanumeric setting adjustable within a predetermined range and imaged on the
3 display as an alphanumeric value, further comprising the step of presenting on the display
4 a graphical representation of at least a portion of the predetermined range proximate the
5 alphanumeric value of the imaged data setting to provide the user with a readily-
6 discernable graphical representation of a scale of the data setting and of a current value
7 of the data setting along the scale as the data setting is adjusted.

1 7. The method of claim 1, further comprising the step of presenting the
2 enlarged image of the data setting on the display in a degree of translucence selected to

3 permit concurrent viewing by the user of another image presented at a location on the
4 display that is at least partly overlaid by the enlarged image of the data setting.

1 8. The method of claim 1, wherein said reducing step comprises
2 reducing the enlarged image of the data setting on the display, from the predeterminedly
3 enlarged size to the predetermined size, a predetermined time interval after said sensed
4 manipulating of the control is determined to have ceased.

1 9. The method of claim 8, wherein the predetermined time interval is in
2 the range of approximately 2 seconds to 4 seconds.

1 10. An aircraft instrumentation display system for presenting to a user at
2 least one manually-adjustable data setting normally imaged in a predetermined size and
3 for facilitating user entry of the manually-adjustable data setting, comprising:

4 a display for presenting the image of the at least one manually-adjustable
5 data setting for viewing by the user;

6 a user-manipulatable control for user adjustment of the manually-adjustable
7 data setting; and

8 a graphics rendering controller connected to the control and to the display
9 and operable for:

10 receiving the data setting,

11 imaging the data setting on the display in the predetermined size,

12 in response to user-manipulation of the control, enlarging the image of the
13 data setting on the display from the predetermined size to a predeterminedly

14 enlarged size to unambiguously direct the user's attention to the predeterminedly
15 enlarged imaged data setting to be adjusted,
16 maintaining the enlarged image of the data setting on the display during
17 said user manipulation of the control, and
18 reducing the enlarged image of the data setting on the display from the
19 predeterminedly enlarged size to the predetermined size when user manipulating
20 of said control has ceased.

1 11. The display system of claim 10, wherein said predetermined
2 enlargement comprises an approximate doubling of the predetermined size of the
3 image of the data setting on the display.

1 12. The display system of claim 10, wherein said graphics
2 rendering controller is further operable for presenting on the display an imaged
3 frame encircling the enlarged data setting image to further unambiguously direct
4 the user's attention to the imaged data setting to be adjusted.

1 13. The display system of claim 10, wherein the imaged data
2 setting comprises a graphical representation on the display of a parameter having
3 a value to be adjusted, and wherein said graphics rendering controller is operable
4 to enlarge, in response to user-manipulation of the control, the image of the data
5 setting on the display by enlarging at least a portion of the graphical representation
6 at which the adjusted value is graphically imaged.

1 14. The display system of claim 13, wherein said graphics
2 rendering controller is further operable for presenting on the display an imaged
3 frame encircling the enlarged portion of the graphical representation to further
4 unambiguously direct the user's attention to the imaged data setting to be
5 adjusted.

1 15. The display system of claim 10, wherein the imaged data
2 setting comprises an alphanumeric setting adjustable within a predetermined
3 range and imaged on the display as an alphanumeric value, and wherein said
4 graphics rendering controller is further operable for presenting on the display a
5 graphical representation of at least a portion of the predetermined range proximate
6 the alphanumeric value of the imaged data setting to provide the user with a
7 readily-discernable graphical representation of a scale of the data setting and of a
8 current value of the data setting along the scale as the data setting is adjusted.

1 16. The display system of claim 10, wherein said graphics
2 rendering controller is further operable for presenting the enlarged image of the
3 data setting on the display in a degree of translucence selected to permit
4 concurrent viewing by the user of another image presented at a location on the
5 display that is at least partly overlaid by the enlarged image of the data setting.

1 17. The display system of claim 10, wherein said graphics
2 rendering controller is operable for reducing the enlarged imaged of the data
3 setting on the display by reducing the enlarged image of the data setting on the

predeterminately enlarged size to the predetermined size, a predetermined time interval after user manipulating of the control has ceased.

18. The display system of claim 17, wherein the predetermined time interval is in the range of approximately 2 seconds to 4 seconds.

19. The display system of claim 10, wherein said display comprises a flat panel display.